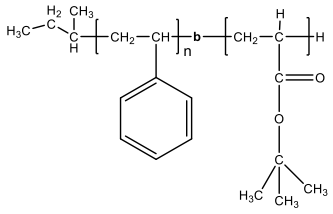
Product Profile

Identification

Product Name: Poly(styrene)-b-poly(tert-butyl acrylate)
Product Lot Number: P45158-StBuA
Product Chemical Architecture:



Composition:

Mn x 10^3 P(S-b-tBuA)	Mw/Mn (PDI)
100.0-b-105	1.13
PolyStyrene: 55 mole%	

Method of Synthesis

Poly(styrene-b-tert.acrylate) is prepared by living anionic polymerization in THF at –78 ºC using sec.BuLi initiator adduct with α-methyl styrene in the presence of LiCl. tert.butyl acrylate (tBuA) monomer was added after dilution in THF. More details are available in the published literature.1-3

1. S. K. Varshney, R. Fayt, Ph. Teyssie, and J.P. Hautekeer US Patent 5,264,527 (1993)
2. Ph. Teyssie, R. Fayt, J. P. Hautekeer, C. Jacobs, R. Jerome, L. Leemans and S. K. Varshney Makromolekular Chemie, Macromol. Symp., 1990, 32,61-73.
3. S. K. Varshney, J. P. Hautekeer, R. Fayt, R. Jerome, and Ph.Teyssie Macromolecules, 1990, 23, 2618-2622.

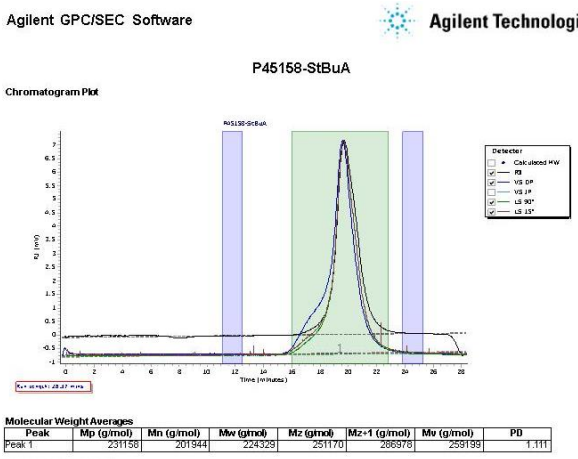
Solubility in different solvents

THF	√		
CHCl3	**X**	DMF	√
Toluene-Hot	**X**	THF-Methanol	√

Purification of Polymer to remove any homo polystyrene fractions.

Validation of Architecture:

A. <u>Gel Permeation Chromatography (GPC), SEC- Profile</u>



B. **HNMR of the polymer run in CdCl3:**

